

ABSTRACT OF THE DISCLOSURE

A method and device to determine the value of the resonant frequency of a resonant sensor subject to an acousto-mechanical or dielectric load, excites the sensor with a first electrical signal having a first frequency, the sensor constantly and simultaneously excited by a second electrical signal having a second frequency different and independent from the first frequency so as to compensate the parallel capacitance of the sensor in an automatic and continuous way. The device including an oscillator circuit having at least one first feedback section to excite the sensor with the first electrical signal having the first frequency, a second feedback section is to constantly and simultaneously excite the sensor with the second electrical signal having the second frequency different and independent from the first frequency so as to compensate the parallel capacitance of the sensor in an automatic and continuous way.